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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/593,894	09/22/2006	Hiroshi Iwamoto	076476-0011	4397
53080 7590 06/18/2009 MCDERMOTT WILL & EMERY LLP 600 13TH STREET, NW WASHINGTON, DC 20005-3096				
EXAMINER				
DYE, ROBERT C				
ART UNIT		PAPER NUMBER		
1791				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/593,894

**Applicant(s)**

IWAMOTO ET AL.

**Examiner**

ROBERT DYE

**Art Unit**

1791

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 24 March 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,4 and 6-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,4 and 6-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 September 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB-08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

1. This Final Office Action is in response to Applicant's reply, dated 3/24/2009, to a non-final Office Action. Claims 1, 4, and 6-11 are pending.

***Claim Objections***

2. Claim 9 is objected to because of the following informalities: Spelling error: Claim 9, line 3, "form" should be --from--. Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:  

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
4. Claims 9 and 10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
5. Claim 9 recites the limitation "second guide disposed on the opposite side of the working unit from the first guide" in line 3. There is insufficient antecedent basis for this limitation in the claim. It is assumed that claim 9 should be dependent upon claim 8 which recites a first guide and not claim 4.

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claim 4 is rejected under 35 U.S.C. 102(b) as being anticipated by Muller (DE 3739675 and English abstract, of record).
3. Muller discloses a cutting device for plastic or metal articles. The apparatus comprises a seat unit (1), a cutting unit 6 which punches out a portion of the article 5 in a downward motion, and a working unit located below the seating unit (Abstract, Fig 1.)
4. Claim 4 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Wold (USP 2,364,334).
5. Regarding claim 4, Wold discloses an apparatus for removing material from an article. The apparatus comprises a seat unit 19 on which the article is placed, a blade unit 37 (which cuts out pieces in a downward motion), and a working unit located below the seat unit (See Fig. 1).
6. Although Wold does not teach that the apparatus is used to remove dissimilar material from a plastic product, such is a matter of intended use of the apparatus. Claims 4 and 8 are directed towards an apparatus and as such will be examined under such conditions. The material worked upon or the process of using the apparatus are viewed as recitation of intended use and are given no patentable weight (Please see MPEP 2114 R1-2115 R2 for further details). The apparatus disclosed by Wold is capable of removing dissimilar material from a plastic product.

7. Regarding claim 8, Wold teaches that a chute 59 can be provided to direct the cut material to a collection box which is positioned beside the working unit (pg 3, col 1, lines 14-18).

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

10. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

11. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Muller (DE 3739675 and English abstract, of record) in view of Yutaka (JP 2002-137225).

12. Muller discloses a method of removing a portion of a plastic article wherein the plastic product is placed on a seat unit (1) and a portion of the article is punched out with a blade unit moving downward (abstract, Fig 1). The working unit is located lower than the seat unit and blade unit (uses hydraulic system located in lower portion of cutting device, see Fig. 1). Muller does not expressly teach that the method is employed to remove dissimilar material; however, it is well known in the art to use cutting devices to remove a dissimilar material. For example, Yutaka discloses a method for using a punch cutting device for removing dissimilar material for the purpose of recycling (abstract). Thus, it would have been obvious to a person having ordinary skill in the art at the time of the invention to employ the cutting device of Muller to remove dissimilar plastic material.

13. Claims 1 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wold (USP 2,364,334) in view of Muller (DE 3739675 and English abstract, of record) and Yutaka (JP 2002-137225, of record).

14. Regarding claim 1, Wold discloses a method for removing material from an article. The apparatus comprises a seat unit 19 on which the article is placed, a blade

unit 37 (which cuts out pieces in a downward motion), and a working unit located below the seat unit (See Fig. 1).

15. Although Wold teaches that the apparatus is employed to cut metal articles, it is known that punch cutting apparatuses can be employed to cut different types of materials, including plastic articles. For example, Muller discloses that a punching device can be used to cut metal as well as plastic articles (abstract). It would have been obvious to a person having ordinary skill in the art at the time of the invention to employ the cutting method of Wold to cut other materials suitable for cutting, such as a plastic article. One would have been motivated to maximize the commercial application of the method of Wold to cut other well-known materials.

16. The combination of Wold and Muller does not expressly teach that the method is employed to remove dissimilar material; however, it is well known in the art to use cutting devices to remove a dissimilar material. For example, Yutaka discloses a method for using a punch cutting device for removing dissimilar material for the purpose of recycling (abstract). It would have been obvious to a person having ordinary skill in the art at the time of the invention to employ the cutting device of Wold to remove dissimilar plastic material.

17. Regarding claim 6, Wold teaches that a chute 59 can be provided to direct the cut material to a collection box which is positioned beside the working unit (pg 3, col 1, lines 14-18).

18. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wold (USP 2,364,334) in view of Muller (DE 3739675 and English abstract, of record) and Yutaka (JP 2002-137225, of record) as applied to claim 1 above, and further in view of Argiropoulos (USP 5,787,751).

19. Wold does not teach the use of a second chute and collection box. In the same field of endeavor of cutting apparatus involving chutes, Argiropoulos discloses an apparatus with two opposing chutes which direct cut material to alternate stations which are construed as collectors of the cut material. These stations perform further processing on the cut materials (abstract). It would have been obvious to a person having ordinary skill in the art at the time of the invention to provide a second chute and collection box as taught by Argiropoulos in the cutter of Wold for the purpose of directing the cut material for further processing. Regarding the claimed position of the second chute as being on the opposite side of the working unit, chutes of Wold and Argiropoulos provide inclined passages for the cut material to travel down under the force of gravity. Their position with respect to the working unit is a mere matter of engineering design choice and it would have been obvious to a person having ordinary skill in the art to place the chutes and collectors in appropriate positions to allow for their operation.

20. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wold (USP 2,364,334) as applied to claim 4 above, and further in view of Argiropoulos (USP 5,787,751).



21. Wold does not teach the use of a second chute and collection box. In the same field of endeavor of cutting apparatus involving chutes, Argiropoulos discloses an apparatus with two opposing chutes which direct cut material to alternate stations which are construed as collectors of the cut material. These stations perform further processing on the cut materials (abstract). It would have been obvious to a person having ordinary skill in the art at the time of the invention to provide a second chute and collection box as taught by Argiropoulos in the cutter of Wold for the purpose of directing the cut material for further processing. Regarding the claimed position of the second chute as being on the opposite side of the working unit, chutes of Wold and Argiropoulos provide inclined passages for the cut material to travel down under the force of gravity. Their position with respect to the working unit is a mere matter of engineering design choice and it would have been obvious to a person having ordinary skill in the art to place the chutes and collectors in appropriate positions to allow for their operation.

22. Claim 10 rejected under 35 U.S.C. 103(a) as being unpatentable over Wold (USP 2,364,334) in view of Argiropoulos (USP 5,787,751) as applied to claim 9 above, and further in view of Hirose (USP 5,682,657).

23. Wold does not teach that the seating unit is movable relative to the working unit in a horizontal direction. However, it is well known in the art to employ a movable seating unit for holding and positioning the article to be worked on. Hirose discloses a cutting device wherein the workpiece is mounted on a table (seating unit) which is movable in a horizontal direction relative to the cutting device (col 4, lines 3-11). It would

have been obvious to a person having ordinary skill in the art at the time of the invention to employ a movable seating unit as taught by Hirose in the apparatus of Wold for the purpose of providing a means to secure the workpiece to the apparatus while allowing for multiple cutting operations at different positions of the workpiece. The movable seating unit also allows for automated positioning of the workpiece with respect to the cutting device.

24. Claim 11 rejected under 35 U.S.C. 103(a) as being unpatentable over Wold (USP 2,364,334) in view of Muller (DE 3739675 and English abstract, of record), Yutaka (JP 2002-137225, of record) and Argiropoulos (USP 5,787,751) as applied to claim 7 above, and further in view of Hirose (USP 5,682,657).

25. Wold does not teach that the seating unit is movable relative to the working unit in a horizontal direction. However, it is well known in the art to employ a movable seating unit for holding and positioning the article to be worked on. Hirose discloses a cutting device wherein the workpiece is mounted on a table (seating unit) which is movable in a horizontal direction relative to the cutting device (col 4, lines 3-11). It would have been obvious to a person having ordinary skill in the art at the time of the invention to employ a movable seating unit as taught by Hirose in the apparatus of Wold for the purpose of providing a means to secure the workpiece to the apparatus while allowing for multiple cutting operations at different positions of the workpiece. The movable seating unit also allows for automated positioning of the workpiece with respect to the cutting device.

***Response to Arguments***

26. Applicant's arguments with respect to claims 1 and 4 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

27. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Herb et al. (USP 4,089,244).

28. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ROBERT DYE whose telephone number is (571)270-7059. The examiner can normally be reached on Monday to Friday 8:00AM to 5:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph S. Del Sole can be reached on (571)272-1130. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

RCD

/Joseph S. Del Sole/  
Supervisory Patent Examiner, Art Unit 1791